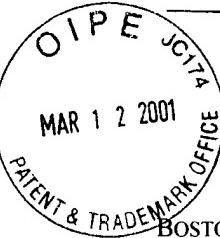


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March 9, 2001

Commissioner for Patents
Washington, D.C. 20231

Re: U.S. Patent Application No.: 09/581,861
YEAST CELLS EXPRESSING MODIFIED G PROTEINS AND METHODS OF USE THEREFOR
 Inventors: James R. Broach, *et al.*
 Filed: June 19, 2000
Our Ref. No.: CPI-012C8US

Dear Sir:

I enclose herewith for filing in the above-identified application the following:

1. Information Disclosure Statement (in duplicate);
2. PTO Form 1449;
3. Full copies of references cited in PTO Form 1449 (except reference K1);
4. A copy of the International Search Report;
5. A copy of the International Preliminary Examination Report; and
6. A Return Postcard.

No additional costs are believed to be due in connection with the filing of this Information Disclosure Statement. However, please charge any necessary fees in connection with the enclosed statement to our Deposit Order Account No. 12-0080. For this purpose, a duplicate of this sheet is attached.

I hereby certify that this correspondence is deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, Washington, D.C. 20231 on:

March 9, 2000

Date

Peter C. Lauro, Esq., Reg. No. 32,360

Respectfully submitted,

LAHIVE & COCKFIELD, LLP

Peter C. Lauro, Esq.
 Registration No. 32,360
 Attorney for Applicants



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the application of: James R. Broach, *et al.*

Serial No.: 09/581,861

Filed: June 19, 2000

For: *YEAST CELLS EXPRESSING MODIFIED G PROTEINS AND METHODS OF USE THEREFOR*

Attorney Docket No.: CPI-012C8US

Group Art Unit: Not Yet Assigned

Examiner: Not Yet Assigned

Commissioner for Patents
Washington, D.C. 20231

Certificate of First Class Mailing (37 CFR §1.8(a))

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, Washington, D.C. 20231 on the date set forth below.

March 9, 2001

Date of Signature and of Mail Deposit

By:

Peter C. Lauro, Esq.
Registration No. 32,360
Attorney for Applicants

INFORMATION DISCLOSURE STATEMENT

Dear Sir:

Applicants and their attorney are aware of the following publications and information, listed on the attached PTO Form 1449, and in accordance with 37 CFR §1.97 hereby submit these publications for the Examiner's consideration. Applicants invite the Examiner's attention to the fact that references A6, C4-C7 and F1 listed on the attached PTO Form 1449 were cited in the International Search Report issued in corresponding International patent application PCT/US98/21168. In addition, reference K1 listed on the attached PTO Form 1449 was cited in the International Preliminary Examination Report issued in corresponding International patent application PCT/US98/21168.

Copies of the aforementioned International Search Report and the International Preliminary Examination Report are enclosed herewith. Inasmuch as the foregoing publication K1 has previously been transmitted to all the designated Offices, including the U.S. Patent and Trademark Office, a copy of this publication is not enclosed herewith. However, full copies of all the remaining publications listed on the attached Form PTO 1449 are enclosed herewith.

This statement is not to be interpreted as a representation that the cited publications are material, that an exhaustive search has been conducted, or that no other relevant information exists. Nor shall the citation of any publication herein be construed *per se* as a representation that such publication is prior art. Moreover, Applicants understand that the Examiner will make an independent evaluation of the cited publications.

Pursuant to 37 CFR § 1.97(b)(3), no additional costs are believed to be due in connection with the filing of this disclosure. If, however, a first Office Action on the merits issues in this application bearing a mailing date prior to the date of this Information Disclosure Statement, please charge the appropriate fee as required under 37 CFR §1.17(p) to our Deposit Order Account No. 12-0080. A duplicate of this document is enclosed.

Respectfully submitted,

LAHIVE & COCKFIELD, LLP



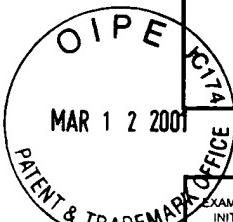
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Date: March 9, 2001

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Enclosures

APPLICANT FACSIMILE OF FORM PTO-1449 REV 7-80	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY DOCKET NO CPI-012C8US	SERIAL NO. 09/581,861
LIST OF PUBLICATIONS CITED BY APPLICANT (Use several sheets if necessary)		APPLICANT James R. Broach et al.	
		FILING DATE June 19, 2000	GROUP



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EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
A1	4,948,874	08/90	Kronvall et al.	350	350	
A2	5,096,815	03/92	Ladner et al.	435	69.1	
A3	5,283,173	02/94	Fields et al.	435	6	

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	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO
A4	WO 88/10308	12/88	PCT			
A5	WO 91/12273	08/91	PCT			
A6	WO 92/05244	04/92	PCT			

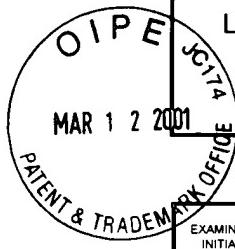
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A7	Akada, R. et al. "Genetic Relationships Between the G Protein $\beta\gamma$ Complex, Ste5p, Ste20p and Cdc42p: Investigation of Effector Roles in the Yeast Pheromone Response Pathway," <i>Genetics</i> 143:103-117 (1996)
A8	Alison, Malcolm R. et al. "Growth factors and growth factor receptors," <i>Brit. J. of Hosp. Med.</i> 49(11):774-88 (1993)
A9	Altieri, Dario C. "Proteases and protease receptors in modulation of leukocyte effector functions," <i>J. of Leukocyte Biol.</i> 58:120-27 (1995)
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A13	Bender, Alan and Sprague, George F. Jr. "Pheromones and Pheromone Receptors Are the Primary Determinants of Mating Specificity in the Yeast <i>Saccharomyces cerevisiae</i> ," <i>Genetics</i> 121:463-76 (1989)
A14	Birnbaumer, Lutz "Transduction of receptor signal into modulation of effector activity by G proteins: the first 20 years or so..." <i>FASEB Journal</i> 4:3178-88 (1990)
A15	Blinder, Dmitry et al. "Constitutive Mutants in the Yeast Pheromone Response: Ordered function of the Gene Products," <i>Cell</i> 56:479-486 (1989)
A16	Brill, Julie A. et al. "A Role for Autophosphorylation Revealed by Activated Alleles of <i>FUS3</i> , the Yeast MAP Kinase Homolog," <i>Molecular Biology of the Cell</i> 5:297-312 (1994)
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A18	Burack, W. Richard et al. "The Activating Dual Phosphorylation of MAPK by MEK Is Nonprocessive," <i>Biochemistry</i> 36(20):5929-5933 (1997)

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	B1	5,401,629	03/95	Harpold et al.	435	6	
	B2	5,436,128	07/95	Harpold et al.	435	6	
	B3	5,468,614	11/95	Fields et al.	435	6	

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	B4	WO 92/08740	05/92	PCT			
	B5	WO 93/10230	05/93	PCT			
	B6	EP 568,925	11/93	EPO			

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B7	Cavallini, Bruno et al. "A yeast activity can substitute for the HeLa Cell TATA box factor," <i>Nature</i> 334:77-80 (1988)
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B12	Clark, Karen L. et al. "Interactions among the Subunits of the G-protein Involved in <i>Saccharomyces cerevisiae</i> Mating," <i>Molecular and Cellular Biol.</i> 13(1):1-8 (1993)
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B14	Coleman, David E. et al. "Structures of Active Conformation of G _{ia1} and the Mechanism of GTP Hydrolysis," <i>Science</i> 265:1405-12 (1994)
B15	Conklin, Bruce R. et al. "Substitution of three amino acids switches receptor specificity of G _{qa} to that of G _{ia} ," <i>Nature</i> 363:274-76 (1993)
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B17	Devlin, James J. et al. "Random Peptide Libraries: A Source of Specific Protein Binding Molecules," <i>Science</i> 249:404-6 (1990)
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C1	5,482,835	01/96	King et al.	435	6	
C2	5,580,736	12/96	Brent et al.	435	6	
C3	5,691,188	11/97	Pausch et al.	435	225.1	

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	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO
C4	WO 94/23025	10/94	PCT			
C5	WO 95/30012	11/95	PCT			
C6	WO 97/11159	03/97	PCT			
C7	WO 98/13513	04/98	PCT			

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C8	Dmochowska, Aleksandra et al. "Yeast KEX1 Gene Encodes a Putative Protease with a Carboxypeptidase B-like Function Involved in Killer Toxin and α -Factor Precursor Processing," <i>Cell</i> 50:573-84 (1987)
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C13	Fasullo, Michael T. and Davis, Ronald W. "Direction of Chromosome Rearrangements in <i>Saccharomyces cerevisiae</i> by Use of his3 Recombination Substrates," <i>Molecular and Cellular Biol.</i> 8(10):4370-80 (1988)
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C16	Fields, Stanley and Song Ok-kyu "A novel genetic system to detect protein-protein interactions," <i>Nature</i> 340:245-46 (1989)
C17	Franke, Arthur E. et al. "Human C5a Anaphylatoxin: Gene Synthesis, Expression, and Recovery of Biologically Active Material from <i>Escherichia coli</i> ," <i>Methods in Enzymology</i> 162:653-68 (1988)
C18	Funaro, Ana et al. "Human CD38 is associated to distinct molecules which mediate transmembrane signaling in different lineages," <i>Eur. J. Immunol.</i> 23:2407-11 (1993)

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	D1	5,739,029	04/98	King et al.	435	254.21	

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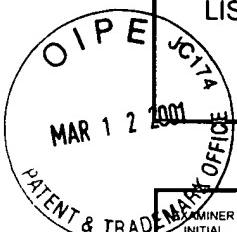
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D2	Gallego, Carme et al. "Myristoylation of the G _{α12} polypeptide, a G protein α subunit, is required for its signaling and transformation functions," <i>Proc. Natl. Acad. Sci. USA</i> 89:9695-99 (1992)
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D11	Harbury, Pehr B. et al. "A Switch Between Two-, Three- and Four-Stranded Coiled Coils in GCN4 Leucine Zipper Mutants," <i>Science</i> 262:1401-07 (1993)
D12	Hartwell, Leland H. "Mutants of <i>Saccharomyces cerevisiae</i> Unresponsive to Cell Division Control by Polypeptide Mating Hormone," <i>J. Cell Biol.</i> 85:811-22 (1980)
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E1	Hiltunen, J. Kalervo et al. "Peroxisomal Multifunctional β -Oxidation Protein of <i>Saccharomyces cerevisiae</i> ," <i>J. of Biol. Chem.</i> 267(10):6646-6653 (1992)
E2	Hrycyna, Christine A. et al. "The <i>Saccharomyces cerevisiae STE14</i> gene encodes a methyltransferase that mediates C-terminal methylation of a-factor and RAS Proteins," <i>The EMBO J.</i> 10(1):1699-1709 (1991)
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E6	Imamoto, Akira et al. "Genetics of signal transduction: tales from the mouse," <i>Curr. Opin. Gen. & Dev.</i> 4:40-46 (1994)
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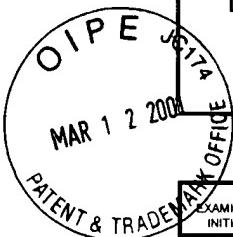
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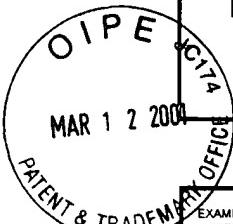
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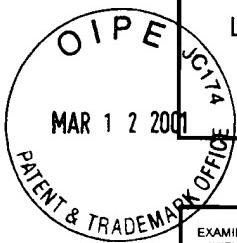
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